APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *18 February 2004*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *9 and 11-27* is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *9 and 11-21* is/are rejected.
7) ☒ Claim(s) *22–27* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *18 February 2004* is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a) ☐ All　b) ☐ Some *　c) ☐ None of:
　　　1. ☐ Certified copies of the priority documents have been received.
　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____ .
4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Response to Amendment

1. Responsive to amendment received on February 18, 2004, claims 1–8 and 10 are cancelled and amended claims 9, 11–13, 15 and new claims 20–27 are entered as requested.

Drawings

2. The drawings are objected to because of the missing sequence number 13 as an input to the frame serializer in figure 3. According to figure 3, the frames with the sequence number 12, 15, 16 and 99 are the inputs to the frame serializer. According to the specification, the frames with the sequence number 12, 13, 15, 16 and 99 are the inputs to the frame serializer. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 9, 12–16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar et al. (US Patent 6,408,003) in view of Jarvinen et al. (US Patent 5,526,366).

In regarding to claim 9, Rezaiifar teaches a method of providing RLP data

checking comprising: receiving a plurality of RLP data frames 70; and passing the

reclassified frame to a RLP data detector 174. Rezaiifar, however, does not teach

identifying from the RLP data frames a suspected bad frame and reclassifying the

suspected bad frame to form a reclassified frame, wherein the reclassified frame is

an erasure. Jarvinen teaches identifying from the RLP data frames a suspected bad

frame 206 and reclassifying the suspected bad frame to form a reclassified frame,

wherein the reclassified frame is an erasure 207. It would have been obvious to

one skilled in the art to modify Rezaiifar to identify and reclassify the suspected

bad frame as taught by Jarvinen in order to remove bad frame (Column 1 Line 61).

In regarding to claim 12, Rezaiifar teaches the steps of characterizing a

received a valid data frame as an invalid data frame responsive to a data frame

sequence parameter (Column 8 Line 58-61).

In regarding to claim 13, Rezaiifar teaches sequencing the plurality of RLP

data frames according to data frame sequence identifiers to form a data frame

sequence (Figure 3).

In regarding to claim 14, Rezaiifar teaches the steps of modifying the data

frame sequence responsive to the data frame sequence parameter (Column 8 Line

58 – Column 9 Line 4).

In regarding to claim 15, Rezaiifar teaches the steps of validating the data

frame sequence (Column 8 Line 58 – Column 9 Line 4).

In regarding to claim 16, Rezaiifar teaches receiving the next data frame

sequence before the steps of validating the data frame sequence (Column 7 Line

20-22).

In regarding to claim 20, Rezaiifar teaches the step of identifying a

suspected bad frame comprises retrieving a data frame sequence identifier from a

received valid data frame; and comparing the data frame sequence identifier with a

data frame sequence parameter (Column 8 Line 58 – Column 9 Line 4).

5.   Claim 11, 17–19 and 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Rezaiifar et al. in view of Jarvinen et al. and further in view of

Saeijs et al. (US Patent 5,596,581).

In regarding to claim 11, Rezaiifar in view of Jarvinen teaches a method of

providing RLP data checking comprising: receiving a plurality of RLP data frames

70; identifying from the RLP data frames a suspected bad frame and reclassifying

the suspected bad frame to form a reclassified frame and passing the reclassified

frame to a RLP data detector 174. Rezaiifar in view of Jarvinen, however, does

not teach the steps of inserting a place holder frame. Saeijs teaches the steps of

inserting a place holder frame (Figure 8c). It would have been obvious to one

skilled in the art to modify Rezaiifar in view of Jarvinen to insert a place holder

frame as taught by Saeijs in order to keep the data frame sequence synchronized.

In regarding to claim 17, Rezaiifar teaches an apparatus for RLP data

checking comprising: a frame serialization stage, the frame serialization stage

coupled to receive a plurality of RLP data frames 70, each of the plurality of RLP

data frames having a sequence number (Column 8 Line 58 – Column 9 Line 4) and

the frame serialization stage being operable to provide a sequenced data frame

output (Figure 3). Rezaiifar, however, does not teach a frame filter coupled to the

frame serialization stage to receive the sequenced data frame output and to provide

a filtered data frame output; and wherein, place holder frames are inserted in the

sequenced data frame output for suspected omitted frames, and erasure frames are

inserted in the filtered data frame output for suspected bad data frames. Jarvinen

teaches erasure frames 207 are inserted in the filtered data frame output for

suspected bad data frames. It would have been obvious to one skilled in the art to

modify Rezaiifar to identify and reclassify the suspected bad frame as taught by

Jarvinen in order to remove bad frame (Column 1 Line 61). Rezaiifar in view of

Jarvinen, however, does not teach the steps of inserting a place holder frame.

Saeijs teaches the steps of inserting a place holder frame (Figure 8c). It would

have been obvious to one skilled in the art to modify Rezaiifar in view of Jarvinen

to insert a place holder frame as taught by Saeijs in order to keep the data frame

sequence synchronized.

In regarding to claim 18, Rezaiifar teaches receiving a next expected

sequence number (Column 10 Line 51-65).

In regarding to claim 19, Rezaiifar teaches the frame serialization stage is

coupled to an output of a frame CRC check stage 88 and the frame filter is coupled

to an input of an RLP data layer 174.

In regarding to claim 21, Saeijs teaches the plurality of RLP data frames

transmitted across a plurality of channels (Column 13 Line 37–45).

Allowable Subject Matter

6.   The indicated allowability of claim 10–19 are withdrawn in view of the

newly discovered reference(s) to Jarvinen et al.. Rejections based on the newly

cited reference(s) are described under the 103(a) rejection above.

7.   Claim 22–27 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

8.   The following are statements reasons for the indication of allowable subject

matter:

In regarding to claim 22, prior art of the record, cited herein, fails to disclose the data frame sequence parameter as a function, at least in part, of a number of channels that the plurality of RLP data frames can be transmitted across.

In regarding to claim 23, prior art of the record, cited herein, fails to disclose the data frame sequence parameter as a function, at least in part, of a number of channels determined to be in active use.

In regarding to claim 25, prior art of the record, cited herein, fails to disclose at least one of the channels as a Discontinuous Transmission (DTX) channel.

In regarding to claim 26, prior art of the record, cited herein, fails to disclose occurrence of the step of reclassifying the suspected bad frame dependent on whether a channel is determined to be currently in active use.

In regarding to claim 27, prior art of the record, cited herein, fails to disclose occurrence of the step of reclassifying the suspected bad frame dependent on an elapsed time from receiving a previous data frame sequence identifier.

Response to Arguments

9.   Applicant's arguments with respect to claim 9 and 11–27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Clemence Han whose telephone number is

(703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone

number for the organization where this application or proceeding is assigned is

703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H.
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